REMARKS

The Office Action of October 30, 2007 has been received and its contents carefully considered.

The present Amendment cancels dependent claims 35 and 36, and transfers their subject matter to independent claim 30. Claim 30 thus now corresponds to objected-to claim 36 in independent form. Accordingly, it is respectfully submitted that claim 30 and its dependent claims are in condition for immediate allowance.

The present Amendment also cancels claims 1-5 and 11-24. This leaves only claims 6-10 and 25-29 as rejected claims. Of these claims, claims 6 and 25 are independent and the rest are dependent.

The Office Action rejects claims 6 and 25 (along with various dependent claims) for obviousness based on US patent 5,157,686 to Omura et al (which will hereafter be called simply "Omura" for the sake of convenient discussion) and an International Publication that the Office Action identifies as Norden et al (and will hereafter be called "Norden"). For the reasons discussed below, however, it is respectfully submitted that the inventions defined by independent claims 6 and 25 are patentable over these references. Claims 6 and 25, it is noted, read on what is shown in Figure 4 of the application's drawings.

Independent claim 6 is a method claim, and independent claim 25 is an apparatus claim corresponding to claim 6. Claim 6 recites the step of "spreading the data signal with a spreading code to generate a transmission signal, wherein the transmission signal corresponds to the data signal." A spreader 406 in Figure 4 spreads a data signal $b(t)$ with a spreading code $c(t)$ to generate a transmission signal $m'(t)$. Claim 6 also recites the step of "encoding the transmission signal into an output transmission signal to be transmitted through a communications medium to a receiver, wherein the output transmission signal contains bits, the value of each bit is either a first value or a second value, and the number of bits with the first value is equal to the number of bits with the second value in the output transmission signal." An encoder 408 in Figure 4 encodes the transmission signal $m'(t)$ into an output transmission signal $m(t)$ to be transmitted through a communications

medium to a receiver. A "wherein" clause in claim 6 specifies that "the output transmission signal is a DC-balanced signal."

An important feature of independent claim 6 is that the encoding step necessary **comes after** the spreading step. The claim states that the spreading step generates a "transmission signal," which is encoded in the encoding step. Similarly, the language of independent claim 25 states that a spreader outputs a transmission signal and that an encoder encodes the transmission signal.

Encoding after spreading is not suggested by either reference. Omura's Figure 1A shows encoding by a Manchester generator 112 and then spreading by a chip code device 113, exactly the opposite in order compared with claims 6 and 25. It should be noted that Omura's RF modulator 115 serves to modulate the output from Omura's inverting device 114 onto a carrier signal for the purpose of RF transmission, but without any encoding connotation. Similarly, Norden does not suggest encoding after spreading.

Accordingly, it is respectfully submitted that independent claims 6 and 25 would not have been obvious, to an ordinarily skilled person, from the Omura and Norden references. Since claims 7-10 depend from claim 6 and recite additional limitations to further define the invention of claim 6, and similarly since claims 26-29 depend from claim 25 and recite additional limitation to further define the invention of claim 25, they are automatically patentable along with their independent claims and need not be further discussed.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,

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